NATIONAL DEFENSE UNIVERSITY

NATIONAL WAR COLLEGE

SEA CHANGE:
STRATEGIC CONSEQUENCES OF THE TRANSFORMATION OF WORLD SHIPPING

John G. Fox/Class of 2000

Course 5672
NAVIES AND NATIONS: NAVAL STRATEGY
IN THE TWENTIETH CENTURY AND BEYOND

FACULTY SEMINAR LEADER:
Professor Rosenberg

FACULTY ADVISOR:
Ambassador Pringle

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
2000	**N/A**	**-**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Sea Change: Strategic Consequences of the Transformation of World Shipping	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **National Defense University National War College Washington, DC**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release, distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**UU**	**21**	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

The necessity of a navy, in the restricted sense of the word, springs …. from the existence of a peaceful shipping, and disappears with it ….

Alfred Thayer Mahan,
The Influence of Sea Power Upon History

Five keys lock up the world! Singapore, the Cape, Alexandria, Gibraltar, Dover. These five keys belong to England, and the five great fleets of England …. will hold these keys.

Admiral of the Fleet Sir John Fisher

SEA CHANGE:
STRATEGIC CONSEQUENCES OF THE
TRANSFORMATION OF WORLD SHIPPING

I. Introduction

Naval power has been closely associated with the protection of commercial shipping since before the time when warships protected the growth of Athens' trading empire. For four hundred years, the British empire expanded under the device "trade follows the flag." In the late nineteenth century, the American naval strategist Alfred Thayer Mahan finally codified the relationship between merchant shipping and naval power in a way that affected and encouraged the development of the war fleets of several nations, including that of the United States.[1]

The naval protection of commercial shipping has, in its turn, traditionally been associated with the assurance of free passage through important, narrow sea lanes – "choke-points." The ability to pass freely through these points, or to deny such passage to adversaries, has long been recognized to be an important element of national power. The founder of German geopolitics, Karl Haushofer – although an army general and a landlubber – gained through his travels a deep appreciation for the strategic leverage imperial Great Britain enjoyed through its control of choke-points around the world.

> Wherever he stopped, at Cyprus, Alexandria, Aden, in India and at Singapore, he was greeted by the Union Jack. Strategically important points all of them, they ringed the Fatherland.[2]

---

[1] Mahan, Alfred Thayer, The Influence of Sea Power Upon History, 1660-1783, Dover Publications, New York (first published 1890).
[2] Sloan, G.R., Geopolitics in United States Strategic Policy, 1890-1987, Wheatsheaf Books, Ltd, Great Britain, 1988, pp. 25-26.

Through the end of the nineteenth century, European powers fought or threatened war over the control of choke-points, most famously the Turkish straits and Suez. Today the seas and oceans remain critical to the world economy. More than 90 percent of internationally traded goods are still being transported by sea. Ensuring freedom of navigation along sea lines of communication and through geographical choke-points remains a primary mission of the United States Navy. And the safety of commercial shipping remains, for the United States -- the world's most important trading nation -- a crucial motivation for this mission. Any suggestion that, for example, free passage through the Straits of Malacca might be threatened would cause sleepless nights for U.S. naval planners and commanders.

In the last quarter-century, however, changes in the fields of commercial shipping, manufacturing processes and oil trading have called into question the close identification of the concepts "navy – commercial shipping – choke-points.". For the United States Navy, these developments will mean changes in how it protects sea lines of communications; a potential divergence between the protection of shipping for military and for commercial purposes; important new vulnerabilities to its logistics flow; a need to plan and work with U.S. government agencies beyond the diplomatic and military world familiar to it; and an appreciation of the heightened role it is insensibly assuming in the grand strategy of the United States. For some other countries, the emerging new maritime world will affect the decision of whether to construct blue-water fleets in order to protect growing overseas interests. Moreover, those countries that may consider impeding the free flow of shipping now face a more complicated calculation of benefit and risk.

The new developments that have brought about these profound shifts include the rise of extremely large container vessels and of ports capable of serving them; the containerization of types of cargoes earlier thought inappropriate for such storage; the decline of the U.S. merchant marine; the "commoditization" of crude oil; and the spread of "just-in-time" manufacturing processes. These changes have re-routed sea-borne commercial traffic; reduced the importance of traditional "choke-points" while increasing the significance of a small number of "mega-ports"; introduced important new vulnerabilities to world shipping; and led to the need to look beyond traditional naval and diplomatic tools to protect maritime commerce. These important trends are likely to continue and to become more significant as time goes on. Their importance has not yet, however, been fully appreciated by strategic planners.

II. "Mega-Ports, Hubs and Spokes, and the "Super-Panamax" Vessel

Perhaps the most far-reaching consequences for the U.S. Navy flow from the growth and transformation of the container shipping business. An increasing percentage of sea-borne traded goods is shipped in containers, owing both to the advantages of containerization (e.g., the cargoes are better protected and easier to load and unload) and to the rising excess capacity in the container shipping business, which drives down shipping rates. If, in 1980, 23 percent of global general cargo trade was shipped in containers, by 1995, the figure had risen to around 50 percent.[3] Increasingly, goods

[3] Coulter, Daniel, "Hub Ports and Focal Points: New Entrants in the Maritime Security Lexicon," (unpublished manuscript provided by the author), p. 3.

earlier thought inappropriate for container transport, such as scrap metal, are being containerized. Military logistics have also been affected by the trend toward greater containerization.[4]

A development of the greatest importance has been the increasing size of container vessels, and a corresponding decrease in the number of ports that can accommodate them. The new "Super-Panamax" vessels, so-called because they are too large to transit the Panama Canal, are capable of carrying up to 6,000 twenty-foot equivalent units (TEUs),[5] and even larger ships are being planned. These large vessels, which offer both economies of scale and higher speeds, can be accommodated only by a small number of very large ports, so-called "Mega-Ports." Many traditional, large ports are simply incapable of handling the newer vessels. One international container shipper has already pulled its 5,000 TEU ships out of Oakland. Hong Kong is unable to handle the largest container ships when they are fully-laden.[6] Modifying older ports to accommodate Super-Panamax vessels is too expensive for many governments or private port operators to afford.

The result of this consolidation of container ports is a new "hub-and-spoke" system for commercial shipping, in which Super-Panamax vessels move only between a limited number of mega-ports, where container cargoes are re-sorted, then loaded onto smaller, "feeder" vessels for delivery to their final destinations.[7]

---

[4] Bishop, Edward D., "Containerization: An Integral Part of U.S. Force Projection Capability," Executive Research Project S103, Industrial College of the Armed Forces, National Defense University, Washington, DC, 1993.

[5] A standard measure of container-carrying capacity.

[6] Forbes, Alasdair and Price, Tom, "Heading for Troubled Waters," (publication?) April 1, 1999

[7] Coulter, Daniel, "Global Shipping Trends and Implications for Navies," (unpublished manuscript provided by author), p. 8.

Other developments have contributed to the growth of this "hub-and-spoke" system, as well. Elaborate computer systems can track bar-coded containers from origin to destination. Some ports, such as Singapore and Rotterdam, have built fully automated cargo-handling systems. These advances, combined with the evolution of sea transport companies from port-to-port shippers into portal-to-portal deliverers that move containers seamlessly from truck to ship to airplane to railroad in a manner transparent to the customer, have made containerized transport a highly efficient, cost-effective and predictable form of transport.[8]

The constant drive for greater efficiency has also made the container shipping business more international. The greater vertical integration of the industry implied by the evolution toward portal-to-portal service, and the need to minimize costs in the face of persistent over-capacity in the industry, have led to several large international alliances among transport companies.[9] As a result, one customer's shipment may travel on several different means of transport owned by firms from several countries. In addition, since Super-Panamax vessels do not sail directly from port of embarkation to destination, but instead carry all containers travelling from one mega-port to another, one vessel will often carry containers from many different countries. For Americans, this "de-nationalization" of the shipping business has been accentuated by the decline of the U.S. merchant marine. At the end of World War II, more than 50 percent of U.S. foreign ocean-going trade was carried on U.S. flag merchant ships. By 1990, this figure had dropped to less than four percent.[10]

---

[8] Coulter, Daniel, *ibid*, p. 8.
[9] Coulter, Daniel, *ibid*, p. 9.
[10] Matthews, James K. and Holt, Cora J., So Many, So Much, So Far, So Fast, United States Transportation Command, 1992, p. 128.

The shipping business does not simply serve the manufacturing sector, it also affects it. The emergence of a highly efficient and predictable system for transporting containerized cargo world-wide has contributed to the development of "just-in-time" manufacturing processes. In this form of manufacturing, factories minimize their costs by maintaining only small inventories of parts and raw materials. They rely on the world shipping system to deliver the necessary components, which may converge on the factory from a number of different countries, shortly before they are actually needed. It is worth noting that the U.S. armed forces have discussed placing their logistics delivery systems on a "just-in-time" basis, as well.

III. The decline of the strategic choke-point

At the same time as mega-ports are growing in importance to the world's commercial shipping, traditional geographic "choke-points" may be losing some of their significance – or may simply always have been less crucial than we thought. For example, the National Defense University (NDU) and the Center for Naval Analysis (CNA) analyzed the importance of the various "choke-points" in South-East Asia, using detailed data on commercial shipping flows and costs.[11] This region includes the Malacca Straits, the second-busiest straits in the world (after the English Channel). Ship traffic through Malacca is several times greater than that through either the Suez or Panama canals.[12] Nevertheless, the NDU/CNA study finds that, if access to the Malacca straits were barred for an extended period, requiring shipping either to skirt the Australian

[11] Noer, John H., Chokepoints, National Defense Univeristy Press, Washington, DC, 1996.
[12] Noer, John H., *op cit*, pp. 2-3.

coast or even to circumnavigate Australia altogether, shipping costs would increase by only 0.2 percent of the cargo's value. The additional cost would be somewhat higher for crude oil, 0.4 percent of the cargo's value.[13]

Moreover, although the U.S. has for some years traded more goods across the Pacific Ocean than across the Atlantic, a surprising small percentage of U.S. traded goods passes through the Malacca straits or the South-East Asian straits altogether – approximately 3.3 percent of U.S. exports and 4.5 percent of imports in 1993.[14] A broader study of the importance of choke-points, now being carried out by the Office of Naval Intelligence (ONI), yields a similarly small reliance of the U.S. on trade through the Suez Canal and the Straits of Hormuz. Nevertheless, because over half the world's internationally traded oil passes through the Straits of Hormuz, a closure of this water-way would have a great direct effect on those countries, particularly those in Asia, most dependent on the Persian Gulf for their oil supplies. And still another important development, this one in how crude oil is bought and sold, has ensured that the Straits of Hormuz will remain of direct importance to the United States.

IV. The "commoditization" of the oil business

The increasing difficulty in identifying what constitutes "American" shipping that ought to be protected by the U.S. Navy situation has been further complicated by another long-term trend in the world trading system, that of the so-called "commoditization" of oil. Before the "oil shocks" of the 1970s, most oil was traded internationally on the basis

[13]Noer, John H., *op cit*, pp. 45-46.

of long-term contracts with oil companies that were vertically-integrated – that is, they owned the entire line of production, from well-head through transport and refining, to the gas pump. In the 1970s, however, as oil-producing states increasingly ruptured their relationships with individual oil companies and took over the marketing of crude oil themselves, oil companies transformed themselves into trading companies that bought and sold oil world-wide. As a result, a world of fragmented oil markets linking specific oil-producing and oil-consuming countries was increasingly replaced by a global market in which oil of a given quality is traded on the "spot" market at a single, world price – in short, oil became a "commodity."[15]

The consequence of a single world market for oil in which price information spreads rapidly is both simple and crucial – far more than in the past, a disruption of oil supplies anywhere in the world will influence the price of oil everywhere. Now the United States obtains only a small and declining portion of its oil from the Persian Gulf – it has been estimated that, by 2010, such imports will amount to less than five percent of U.S. oil consumption.[16] Nevertheless, the integration of the world's oil market means that a disruption of oil supplies from the Gulf would affect the price of America's imported oil just as much as if it had originated in the Gulf. If the internationalization of the container shipping business has made it very difficult to decide which shipping is "American," and thus needs to be protected, the commoditization of oil has rendered the concept nearly meaningless.

---

[14] Quoted in Coulter, Daniel, "Maritime Chokepoints: Setting the Record Straight," (unpublished manuscript provided by the author), p. 5.
[15] Yergin, Daniel, The Prize, Simon & Schuster, New York, 1992, p. 722.

V. New capabilities, new vulnerabilities

The picture that emerges then, is of an increasingly efficient international trading system based on "hub-and-spoke" routes that converge on a relatively small number of "mega-ports" capable of handling large container ships. These large ports are scattered unevenly throughout the world (see Table 1 and Figure 1). The system increasingly serves a number of large, international shipping "alliances," many of whose ships sail under flags of convenience. And the ships serving these ports are difficult to identify with a particular importing or exporting country.

Table 1
"Megaports" of the World[17][18]

Port	Country
1. Antwerp	Belgium
2. Le Havre	France
3. Rotterdam	Netherlands
4. Algeciras	Spain
5. Valencia	Spain
6. Long Beach	United States
7. Oakland[19]	United States
8. Seattle	United States
9. Tacoma	United States
10. Kobe	Japan
11. Port Klang	Malaysia
12. Kaohsiung	Taiwan
13. Singapore[19]	Singapore

[16] Jaffe, Amy and Manning, Robert, "The Myth of the Caspian 'Great Game': The Real Geopolitics of Energy," Survival, Vol. 40, no. 4 Winter 1998-99, p. 123.
[17] Sources: 1) American Association of Port Authorities; 2) Containerization International Yearbook, 1999, Emap Business Communications, Ltd., London, 1999.
[18] I have included ports that, according to the sources in footnote 1, have at least one container berth at least 15 m deep and with a quai length of at least 330 m. The third criterion for a megaport, crane outreach of at least 48 m, is not listed in the sources. Instead, source 2 describes cranes either by the weight they are designed to lift or by some general designation, such as "SuperPostPanamax cranes."
[19] This port does not meet the criteria of depth and quai length required for it to be called a "megaport," but, according to source 2, has stated its intention to upgrade its facilities to "megaport" status.

Figure 1: Mega-Ports

Moreover, at the same time as mega-ports grow more important, traditional geographical “choke-points” may have less significance to commercial shipping than had been thought. There is an irony to all this. As commercial shipping grows more internationalized and less associated with individual trading nations, the “critical nodes” in the system are becoming more nationalized – that is, in lieu of choke-points whose

access often either lies in international waters or is governed by international agreement, we now have mega-ports built on sovereign territory.

A more important point is that the efficiencies of the emerging shipping system are accompanied by serious new vulnerabilities. To begin with, the economic and financial consequences of blocking access to a mega-port can be far greater than those of blocking a choke-point. According to the NDU/CNA study of South-East Asian choke-points, for example, the additional shipping cost caused by blocking access to a major port would be around 20 percent of the value of the cargo, as opposed to 0.2 percent in the case of blocking a major choke-point.[20]

The causes of this disparity in cost are easy to see. As Daniel Coulter points out,[21] ships can circumnavigate a choke-point, whereas there may well be no alternative mega-port through which they can divert their cargoes – a problem that becomes more acute as these ports grow larger and fewer in number. Moreover, the economic costs and time delays associated with diverting a ship around a choke-point are calculable. By contrast, container vessels depending on mega-ports adhere to a strict, fixed sailing schedule whose disruption could have economic effects that would be both great and hard to predict. The very efficiency of the "hub-and-spoke," portal-to-portal shipping system, which makes "just-in-time" manufacturing practical, also renders it more vulnerable to disruption.

Mega-ports are also vulnerable in ways that choke-points are not. Of course, ports can be closed by the same means used to threaten choke-points: surface ship

[20] Noer, John H., *op cit*, p. 47.
[21] Coulter, Daniel, "Hub Ports and Focal Points: New Entrants in the Maritime Security Lexicon," (unpublished manuscript provided by the author), p. 1.

blockade, submarines, aviation and mining. In addition, however, the highly computerized mega-ports can be threatened by cyber-attack. They are vulnerable to labor strikes, which could be fomented by an enemy. A large port could also be rendered unusable for an extended period by the detonation of a radiation, chemical or biological weapon inserted into the port within a shipping container – and the already difficult task of detecting such weapons sealed in containers has been exacerbated by the nature of the hub-and-spoke shipping system, in which containers may be re-sorted and reloaded onto several ships in the course of a single voyage.[22] Even a credible but bogus claim that a container holding a weapon of mass destruction had already been inserted into a port could disrupt operations for quite a while as workers and police sought frantically for it. Of course, smaller, more traditional ports are subject to many of the same sorts of threats, but such ports are not critical nodes in the global trading system – and, therefore, are not such attractive targets -- as mega-ports are now becoming.

VI. What does it all mean for the U.S. Navy?

For the United States Navy, the developments discussed above have consequences on a number of levels, ranging from the tactical to the grand strategic. The first question to raise, in the light of the increasing importance of mega-ports and the exaggerated importance heretofore given to at least some geographical choke-points, is this: have we had our eye on the wrong ball? Should the Navy shift its thinking on sea-lane protection from choke-points to mega-ports? If so, how should those ports be

[22] For a discussion of how biological weapons could be used to paralyze U.S. defense transportation, see Larsen, Randall J. and Kadlec, Robert P., "Biological Warfare: A Silent Threat to America's Defense

protected? The earlier discussion of the vulnerabilities of mega-ports suggests that naval planning may have to incorporate other U.S. government agencies to an unusual degree. Diplomats will be needed to deal with the sovereign governments that own mega-ports. Intelligence agencies and law enforcement agencies will have to contribute to fighting the threat of terrorism and cyber-attack. The protection of sea-lanes will be far from a purely naval problem.

Of course, not all of this is qualitatively new. Longshoremen's strikes have frequently interrupted port activities. Diplomacy has always been an important tool in gaining and maintaining access to seaports and important water passages – the Union Jacks that made such a deep impression on General Haushofer probably flew over British consular representations. The essential differences today are the growing criticality of mega-ports, the wide variety of vulnerabilities they are subject to and the need to incorporate domestic U.S. law enforcement agencies, such as the FBI, into the business of sea-lane protection.

Possibly the problem is not having our eye on the wrong ball, after all. Perhaps we simply must watch two balls at once. That is, perhaps the Navy will henceforth have to safeguard both mega-ports and geographical choke-points. This will be true to the extent that commercial traffic travels along "hub-and-spoke" routes, while naval power projection continues to rely on passage through choke-points.

In fact, naval logistics now depend on both sorts of routes. Over 90 percent of U.S. cargo needed to fight the Gulf War was moved into the theater by sea[23] -- a figure strikingly similar to the percentage of the world's traded goods transported by sea. Much

---

Transportation System," Strategic Review, Spring 1998, pp. 5-10.

[23] "Desert Storm Lessons Learned," Naval Historical Center, Washington DC, Chapter VI, p. 7.

of this cargo was moved directly to the theater from ports in the U.S. and Europe by means of dedicated military sea-lift or by leased ships (most of them foreign-flagged) moving along routes controlled by the U.S. military. Some military cargo, however, moved by commercial container ship along normal commercial routes. During the Gulf crisis, the Military Sealift Command contracted with U.S. shipping companies to transport Department of Defense cargo aboard regularly scheduled United States-Middle East liner services. Approximately 37,000 40-foot containers were shipped under this arrangement. Consequently, U.S. military logistics for the Gulf War were dependent upon both direct routings and commercial hub-and-spoke routings.

The U.S. armed forces' dependence on commercial shipping routes seems likely to increase. For one thing, commercial shipping can be much more efficient than the U.S. military logistics system. For example, Daniel Coulter points out[24] that, during Desert Shield/Desert Storm, the Department of Defense took 40-60 days to re-supply the same parts that Caterpillar could deliver anywhere in the world in just four days. And if the most extreme scenario foreseen in the U.S. National Military Strategy – that of U.S. military involvement in two nearly-simultaneous major regional conflicts – ever came to pass, U.S. lift capability would be stretched to such a degree that an even greater dependence on regularly scheduled shipping than during the Gulf crisis would probably be inevitable. An increasing dependence on commercial shipping routes will increase military logistics' vulnerabilities to the same threats discussed above for commercial shipping – a problem that will become even worse if logistics are placed on a "just-in-time" basis.

[24] Coulter, Daniel, "Global Shipping Trends and Implications for Navies," (unpublished manuscript), p. 17.

In addition, if U.S. military logistics do become more dependent on commercial hub-and-spoke routings, a question of strategic inflexibility may arise. Some areas of the world – those near one or more mega-ports – may become significantly easier to supply than others. And, as Figure 1 makes clear, mega-ports are grouped in only a few areas of the world. The nineteenth century analogy of railroads comes to mind. During the American Civil War, railroads provided commanders the means to move unprecedented quantities of men and supplies at unheard of speeds. But the capacity and efficiency of railroads tended to obscure a major disadvantage – that trains could only travel where tracks had been laid. Something like this rigidity may turn out to be inherent to hub-and-spoke shipping routes.

Another question for naval planners to ponder is whether the transformation of commercial shipping may affect the calculations of potential enemies. A mega-port may be a particularly attractive target to an adversary aware of both the damage that could be done to manufacturing around the world by disabling the port and of its multiple vulnerabilities. Even threatening to deny access to the port could prove to be a potent political lever. But the calculation is a fine one. A threat to disable a port, precisely because such an action would be so disruptive, would be likely to give rise to a strong reaction on the part of those nations potentially affected. And the U.S. Navy, in particular, can look forward to pressure from home to "do something" at the first sign of trouble at a key mega-port. The fact, for example, that Taiwan is home to the third-largest container port in the world adds another strategic dimension – and thus another strategic complication for U.S. planners -- to the tension between Beijing and Taipei.

The new shape of commercial shipping can affect a potential adversary's calculations on a strategic level, as well. For example, China's economic growth is expected to increase its demand for crude oil by up to five million barrels per day by the year 2015.[25] This increased consumption will, in turn, create interests for China in the areas of oil and gas pipelines and shipping lanes from the Near East, among other things. One possible response by Beijing – one it appears to be making -- is to develop a blue-water navy capable of protecting the sea lines of communications it requires to import crude oil.

On the other hand, if Beijing appreciates the significance of the developments we have discussed – particularly the de-nationalization of merchant shipping and the commoditization of oil – then cold reason may tell Chinese leaders that the U.S. Navy is protecting not only U.S. shipping but, as a by-product, Chinese shipping, as well. Conceivably, this line of reasoning, if combined with a desire to devote as many resources as possible to internal economic development, could lead China to reassess its need for a large navy. Beijing might even propose cooperative arrangements with the U.S. Navy for protecting sea lanes – in spite of its current firm rejection of such a course.

VII. "Free Riders" and Grand Strategy

The Chinese example leads to a broader topic: how the changes in world commercial shipping have contributed to a transformation in the significance of American power world-wide – and thus to a heightened role for the U.S. Navy in the

[25] Cooper, Richard N., "The Gulf Bottleneck; Middle East Stability and World Oil Supply," International Energy Security, Sumer 1997, p. 20.

grand strategy of the United States. As single ships increasingly carry goods owned by many countries on a single voyage, and as oil cargoes are traded back and forth on the world "spot" market even as the tankers carrying them are under way, it becomes ever more difficult to associate the protection provided for shipping by the U.S. Navy with specifically American cargoes. For the Navy, this state of affairs harbors both a danger and an opportunity. The danger is that influential voices may be heard questioning whether so much money should be spent on a navy that, in fact, protects mostly non-U.S. commerce. In such a debate, one could expect to hear it argued, for example, that the amount spent for U.S. Naval protection of Persian Gulf oil is wholly out of proportion to the value of Gulf oil imported by the United States. Is not the rest of the world riding free while the United States pays the bill?

But the matter can also be viewed from a wholly different perspective. The German political commentator Josef Joffe has noted the remarkable fact that the United States has, since the Cold War ended, succeeded in maintaining hegemonic influence while not alienating other countries to the extent that they make a serious attempt to balance American power.[26] Joffe attributes this to the fact that the U.S., while pursuing its own interests, incidentally provides services, or "common goods," to the world at large:

> The genius of American diplomacy in the second half of this century was building institutions that would advance American interests by serving others.

By "institutions," Joffe primarily meant NATO, the Bretton Woods financial institutions and the like. But surely the U.S. Navy and its protection of world shipping fit Joffe's underlying meaning and, therefore, ought to be considered a significant element

of American overall power – in other words, a component of U.S. grand strategy. In fact, the Navy's ability to provide services to other countries while pursuing U.S. interests may, as in the hypothetical case of China, above, create an interest on the part of others for the continuation and maintenance of U.S. power – if so, the Navy will indeed have succeeded in "doing well by doing good."

An historical analogy comes to mind. Throughout the nineteenth century and even, to a certain extent, up until the Second World War, the Royal Navy – not the U.S. Navy -- enforced the Monroe Doctrine and provided naval protection for the east coast of the United States. The Royal Navy did so as a by-product of pursuing British interests; in particular, commercial interests in Latin America. When Great Britain was threatened by Germany, both in 1914 and in 1939, former President Theodore Roosevelt and, in the latter case, President Franklin Roosevelt argued for the United States to come to the aid of the British. In each case, one of the arguments was the same – that if Britain fell, the Royal Navy's protection of the United States would fall with it.[27] The Royal Navy then, as the U.S. Navy today, inadvertently provided a "free good" that created an interest on the part of others for the preservation of British power.

The transformation of world commercial shipping practices over the past quarter-century has, indeed, wrought a sea change in the way navies must view one of their most important tasks, the maintenance of freedom of navigation. The precise implications of the change can be debated, but the first step – to appreciate the profound changes in the challenges faced by navies and to ask how to face them – should be clear. Have we taken it?

---

[26] Joffe, Josef, "How America Does It," Foreign Affairs, September/October 1997, pp. 13-27.

[27] Kissinger, Henry, Diplomacy, Simon & Schuster, New York, 1994. Concerning Theodore Roosevelt, see p. 42. For Franklin Roosevelt's view of the significance of the Royal Navy, see p. 387.